



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,637	02/13/2004	Kang Soo Sco	1740-000029/US	5373
,30593 7590 03/06/2007 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195			EXAMINER LE, MICHAEL	
			ART UNIT	PAPER NUMBER
			2163	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/777,637

Applicant(s)

SEO ET AL.

Examiner

Michael Le

Art Unit

2163

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Summary and Status of Claims

1. This Office Action is in response to the reply filed October 10, 2006.
2. Claims 1-15 are pending.
3. Claims 12-15 are objected to for minor informalities.
4. Claims 10 and 11 are rejected under 35 U.S.C. 112, second paragraph.
5. Claims 1-11, 14 and 15 are rejected under 35 U.S.C. 101.
6. Claims 1-15 are rejected under 35 U.S.C. 102(b,e) as being anticipated by Ijichi et al. (US Patent Pub 2002/0093886).

Priority

7. Applicant's claim of foreign priority to Korean Application Serial No. 10-2003-012393 filed February 27, 2003 is acknowledged, however, certified foreign priority documents have not been received. Consequently, foreign priority is not granted until Applicant satisfies the requirements under 35 U.S.C. 119(a)-(d) or 365(b) as appropriate.

Drawings

8. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated as noted by Applicant's disclosure in paragraph 0004. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion

Art Unit: 2163

of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

9. **Claims 12-15 are objected to** because of the following informalities:

10. In **claim 12**, line 2, “the recording medium” has to be changed to --a recording medium--.

11. In **claim 13**, line 2, “the recording medium” has to be changed to --a recording medium--.

12. In **claim 14**, line 2, “the recording medium” has to be changed to --a recording medium--.

Also, in lines 3, 5 and 8, “driver” has to be changed to --drive-- to maintain consistency with the specification.

13. In **claim 15**, line 2, “the recording medium” has to be changed to --a recording medium--.

Also, in lines 3 and 5, “driver” has to be changed to --drive-- to maintain consistency with the specification.

14. Claims 14 and 15 are rejected under 35 U.S.C. 101 below until the corrections to “driver” are made thereby satisfying the statutory requirement.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

15. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2163

16. **Claims 10 and 11 are rejected under 35 U.S.C. 112, second paragraph**, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

17. **Claim 10** recites the limitation "the playlist" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim. Additionally, the limitation "the playlist directory" in line 3 lacks antecedent basis. Claim 10 seems to depend on claim 8, however it actually depends on claim 6. For the prior art rejections below, claim 10 will be treated as if it depends on claim 8 to correct antecedent basis issues.

18. **Claim 11** recites the limitation "the playlist" in line 1, which lacks antecedent basis. Additionally, the limitation "the stream directory" recited in line 3 lacks antecedent basis. Claim 11 depends on claim 10 and addressed below given the interpretation that claim 10 depends on claim 8 in order to correct antecedent basis issues.

19. The prior art rejections below for claims 10 and 11 are made as best understood in light of the 35 U.S.C. 112, second paragraph rejections addressed above.

Claim Rejections - 35 USC § 101

20. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

21. **Claims 1-11, 14 and 15 are rejected under 35 U.S.C. 101** because the claimed invention is directed to non-statutory subject matter.

22. The basis of this rejection is set forth in a test of whether the invention is categorized as a process, machine, manufacture or composition of matter and if the invention produces a useful,

Art Unit: 2163

concrete and tangible result. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) are found to be non-statutory subject matter.

23. In the present case, **claims 1-11** recite a recording medium having a data structure, however the claim limitations do not describe a data structure. A data structure is a physical or logical relationship among data elements designed to support specific data manipulation functions. The data structure of claims 1-11 contains only two potential data elements, “first playback indicator” and “navigation command field”. Out of these two, the first playback indicator can be interpreted as simply the name of the navigation command field, thus there would only be one data element on the recording medium. Therefore, there can be no physical or logical relationship among data elements. Thus, the recording medium of claims 1-11 is nonstatutory.

24. **Claims 14 and 15** recite apparatuses for recording and reproducing respectively. Each of the claims recite a “driver” as a component of their respective apparatus. A driver, as known in the art, is software that allows for hardware to be recognized by an operating system. Therefore, the apparatuses of claims 14 and 15 are software per se and do not meet the statutory requirements to be categorized under the statutory category of manufacture, which require that a manufacture have physical structure. Thus, claims 14 and 15 are nonstatutory.

To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

Claim Rejections - 35 USC § 102

25. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

26. **Claims 1-15 are rejected under 35 U.S.C. 102(b,e) as being anticipated by Ijichi et al. (US Patent Pub 2002/0093886) hereinafter “Ijichi”.**

27. In regards to **claim 1**, Ijichi discloses a recording medium (Figs. 2B to 2D) having a data structure for managing playback control of the recording medium, comprising:

a. a navigation area storing an information file including a first playback indicator, the first playback indicator identifying a navigation command field for execution at first playback of the recording medium (Fig. 5; para. 0116)¹, the navigation area further storing the identified navigation command field, the identified navigation command field including at least one navigation command (Fig. 6; para. 0160, lines 2-4; para. 0174)².

28. In regards to **claim 2**, Ijichi discloses the recording medium of claim 1, wherein the first playback indicator includes a name for the identified navigation command field (Fig. 6, “PTK1”

¹ The memory stick directory structure is interpreted as the navigation area. The table of contents (TOC) is interpreted as the information file and it includes information such as access positions, song names, numbers, etc, all of which could individually be interpreted as a first playback indicator. See also figure 6, which shows a TOC where TRK1 can be interpreted as a first playback indicator, which identifies a navigation command field.

² “PTK1” is interpreted as the navigation command field and it includes a navigation command to play track 1 as shown by the arrow.

Art Unit: 2163

is the name of the navigation command field, which is identified by the first row of the TOC, which is interpreted as the first playback indicator.).

29. In regards to **claim 3**, Ijichi discloses the recording medium of claim 1, wherein the first playback is when the recording medium is first read (para. 0125, lines 4-7; para. 0160).

30. In regards to **claim 4**, Ijichi discloses the recording medium of claim 1, wherein the identified navigation command field includes a navigation command for launching a playlist (Fig. 6; para. 0125, lines 4-7; para. 0160; "PTK1" launches the default playlist starting with track 1 since the device starts with track 1 by default).

31. In regards to **claim 5**, Ijichi discloses the recording medium of claim 4, wherein the playlist includes navigation information for reproducing at least a portion of a clip file (para. 0125, lines 4-7; para. 0160).

32. In regards to **claim 6**, Ijichi discloses the recording medium of claim 1, wherein the information file is stored in main directory, which is a sub-directory of a root directory for the recording medium (Fig. 5)³.

33. In regards to **claim 7**, Ijichi discloses the recording medium of claim 6, wherein the first playback is when the recording medium is first read (para. 0125, lines 4-7; para. 0160).

34. In regards to **claim 8**, Ijichi discloses the recording medium of claim 6, wherein the main directory further includes a playlist directory storing at least one playlist (Fig. 5; para. 0121), a clip information file directory storing at least one clip information file (Fig. 5; para. 0121) and a stream directory storing at least one clip file (Fig. 5; para. 0121)⁴.

³ As shown in figure 5, the TOC (information file) is stored in the HI-FI directory which is a sub-directory of a root directory.

⁴ Fig. 5 shows a directory for HI-FI, which stores all three types of data of playlists, clip information and a clip file. Paragraph 0121 discusses that the directory is but an example and that other files and sub-directories could exist.

Art Unit: 2163

35. In regards to **claim 9**, Ijichi discloses the recording medium of claim 6, wherein the first playback indicator includes a name for the identified navigation command field (Fig. 6, “PTK1” is the name of the navigation command field, which is identified by the first row of the TOC, which is interpreted as the first playback indicator.).

36. In regards to **claim 10**, Ijichi discloses the recording medium of claim 6, wherein the identified navigation command field includes a navigation command for launching the playlist in the playlist directory (Fig. 7; para. 0125, lines 4-7; para. 0160; “PPL1” launches the corresponding playlist).

37. In regards to **claim 11**, Ijichi discloses the recording medium of claim 10, wherein the playlist includes navigation information for reproducing at least a portion of the clip file in the stream directory (para. 0125, lines 4-7; para. 0160)⁵.

38. In regards to **claim 12**, Ijichi discloses a method of recording a data structure for managing playback control of the recording medium, comprising:

- a. recording an information file on the recording medium, the information file including a first playback indicator, the first playback indicator identifying a navigation command field for execution at first playback of the recording medium (para. 0119); and
- b. recording the identified navigation command field on the recording medium, the identified navigation command field including at least one navigation command (para. 0119).

⁵ An audio file is reproduced, which is in the directory and potentially be in a stream directory as explained in footnote 4.

Art Unit: 2163

39. In regards to **claim 13**, Ijichi discloses a method of reproducing a data structure for managing playback control of the recording medium, comprising:

- a. reproducing an information file from the recording medium, the information file including a first playback indicator, the first playback indicator identifying a navigation command field for execution at first playback of the recording medium (Fig. 9; para. 0119); and
- b. reproducing the identified navigation command field from the recording medium, the identified navigation command field including at least one navigation command (Fig. 9; para. 0119).

40. In regards to **claim 14**, Ijichi discloses an apparatus for recording a data structure for managing playback control of the recording medium, comprising:

- a. a drive for driving an optical recording device to record data on the recording medium (Fig. 3C);
- b. a controller for controlling the driver to record an information file on the recording medium, the information file including a first playback indicator, the first playback indicator identifying a navigation command field for execution at first playback of the recording medium; and controlling the driver to record the identified navigation command field on the recording medium, the identified navigation command field including at least one navigation command (Para. 0085).

41. In regards to **claim 15**, Ijichi discloses an apparatus for reproducing a data structure for managing playback control of the recording medium, comprising:

Art Unit: 2163

- a. a drive for driving an optical reproducing device to reproduce data recorded on the recording medium (Fig. 3C);
- b. a controller for controlling the driver to reproduce an information file from the recording medium, the information file including a first playback indicator, the first playback indicator identifying a navigation command field for execution at first playback of the recording medium; and to reproduce the identified navigation command field from the recording medium, the identified navigation command field including at least one navigation command (Para. 0085).

Response to Arguments

42. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new grounds of rejection.

Conclusion

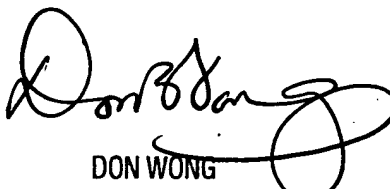
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Le whose telephone number is 571-272-7970. The examiner can normally be reached on Mon-Thurs : 9:30am-6pm, Fri: 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2163

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael Le
Art Unit 2163
March 1, 2007



DON WONG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100